

Dr. Joshua B. Fisher

joshbfisher@gmail.com

<http://josh.yosh.org/>

University of Oxford
Environmental Change Institute
School of Geography and the Environment
South Parks Road, Oxford, OX1 3QY, UK

CURRENT POSITION

• **Research Scientist**, Water & Carbon Cycles Group, NASA Jet Propulsion Laboratory (JPL), California Institute of Technology (CalTech)

EDUCATION

• **Post-Doctoral Research Associate, University of Oxford, UK** (2006 – 2008)

Environmental Change Institute, School of Geography & Environment

I. Global modelling of atmosphere-vegetation-soil interactions

II. Nutrient dynamics in cloudforests and rainforests in the Peruvian Andes

Supervisor: Yadvinder S. Malhi

• **Ph.D., University of California, Berkeley, USA** (2001 – 2006)

Department of Environmental Science, Policy & Management

I. The land-atmosphere water flux across plant, ecosystem, global and social scales.

II. GIS and spatial analysis for environmental justice and wildlife.

Dissertation co-chairs: Dennis Baldocchi & Greg Baging

Committee members: Todd Dawson & Louise Fortmann

• **B.S., University of California, Berkeley, USA** (1997 – 2001)

College of Natural Resources: Environmental Sciences

Evapotranspiration methods compared on a Sierra Nevada forest ecosystem

Senior thesis advisor: Ye Qi

HONORS AND AWARDS

- Junior Research Fellowship, Linacre College, Oxford University (2009)
- Oxford University, School of Geography and the Environment, ECI Divisional Merit Award (2008)
- University of California, Berkeley Faculty Research Grant (\$10,000 over 2 years) (2004 – 2006)
- G. Fitzgarrald Martin Scholarship (2005)
- NASA Earth System Science Fellowship (\$72,000 over 3 years) (2002 – 2005)
- American Public Health Association Environment Section Student Award Poster Session (1st Place) (2003)
- US EPA, Region 9 Air Division Certificate of Appreciation (2001)
- The National Dean's List Award (2001)
- Association of California Water Agencies (2000)
- Los Angeles Audubon Society Urban Wildlife Award (1993)

Travel Awards

- Cape Farewell, Designated Scientist to Andes Expedition (2009)
- Royal Society, Conference Grant (2008)
- iLEAPS Conference Travel Award (2008)
- European Science Foundation Conference Travel Award (2008)
- Large Scale Biosphere-Atmosphere Experiment in Amazonia Travel Award (2007)
- Oxford University ECI Small Grants for Postgraduate Research (2007)
- British Council International Networking for Young Scientists (2006)

RESEARCH

• **Post-doctoral Research Associate** (2006 – 2008)

University of Oxford, Environmental Change Institute, School of Geography & Environment

1. Plant nitrogen modeling for a dynamic global vegetation model (DGVM) in quantifying ecosystem roles in the carbon cycle (QUERCC), part of the £23 million Natural Environment Research Council (NERC) program in quantifying and understanding the Earth system (QUEST) linked with the Hadley Centre's climate model.

2. Ecosystem modeling and ecology for a £275,000 grant from the Natural Environment Research Council (NERC) and the Moore Foundation for an elevation transect along the Peruvian Andes. Assessment of the nutrient dynamics, set up and conduct a fertilization experiment (NE/D014174/1).

• **Graduate Student Researcher** (2001 – 2006)

University of California, Berkeley, USA, Department of Environmental Science, Policy, & Management

1. The land-atmosphere water flux across plant, ecosystem, global and social scales. Funded by NASA and UC Berkeley.

2. GIS and spatial analysis for environmental justice and wildlife. In collaboration with the US EPA and NASA.

• **Research Assistant** (1998 – 2001)

University of California, Berkeley, USA, Department of Environmental Science, Policy, & Management

Lab work, modeling and analyses with AmeriFlux data.

PROFESSIONAL EXPERIENCE

- **Research Scientist** (2010 – current)

Water & Carbon Cycles Group, NASA Jet Propulsion Laboratory (JPL), California Institute of Technology (CalTech)

- **Research Fellow, Departmental Lecturer** (2008 – 2009)

University of Oxford, Environmental Change Institute, School of Geography & Environment

Led teaching and research for GIS and Remote Sensing.

- **GIS Consultant** (2003 – 2005)

National Aeronautics & Space Administration (NASA) Ames Research Center, Office of Safety, Environmental and Mission Assurance

San Jose State University, Department of Environmental Studies

Provided GIS/spatial analyses and map products for the management and protection of Burrowing Owls at Moffett Federal Airfield. Published results in manuscript at *Environmental Management*.

- **Environmental Protection Specialist** (2003)

National Aeronautics & Space Administration (NASA) Ames Research Center, Office of Safety, Environmental and Mission Assurance

Maintained the Hazardous Materials Inventory Database, conducted site inspections of chemical inventories, updated and created maps with AutoCAD; trained and certified in Cryogenic Liquids, Compressed Gas Safety, and Asbestos & Lead Awareness. Conducted GIS analysis for Environmental Justice Implementation Plan, groundwater projects, and Burrowing Owl project.

- **Environmental Protection Specialist** (2001 – 2002)

United States Environmental Protection Agency (US EPA), Region 9: Air Division

1. Integrated spatial statistics, demographics, and Air Division database with GIS to analyze and answer questions for Environmental Justice projects, San Joaquin Valley PM10 network, Region-wide PM2.5 network assessment, California refineries, and the San Francisco Foundation. Summer 2002.

2. Developed Geographic Information Systems (GIS) tool for Air Division including data compilation and management (air quality, pollutant sources, demographics, terrestrial, hydrology, climatology), visual projection, metadata development, analysis. Provided training and presentations on GIS tool. Collaborated with Environmental Justice team. Summer 2001.

PUBLICATIONS

- **Fisher, J.B.**, Malhi, Y., Torres, I.C., Metcalfe, D.B., van de Weg, M., Meir, P., Espejo, J.E.S., Silman, M., Huaraca, W., in review. Nutrient limitation in cloud forests and rainforests along a 3000 m elevation gradient in the Peruvian Andes. Submitted to: *Global Change Biology*.

- Armanios, D., **Fisher, J.B.**, in review. Predicting water availability with limited ground data: An entirely remote-sensing based hydrologic budget model of the Rufiji Basin, Tanzania using TRMM, GRACE, MODIS, SRB and AIRS. Submitted to: *Water Resources Research*.

- Krishnamurthy, P.K., **Fisher, J.B.**, Johnson, C., in review. Mainstreaming local perceptions of hurricane risk into policymaking: A case study of community-based vulnerability GIS in Mexico. Submitted to: *Global Environmental Change*.

- Attua, E.M., **Fisher, J.B.**, in review. Historical and future land cover change in a municipality of Ghana. Submitted to: *Earth Interactions*.

- Attua, E.M., **Fisher, J.B.**, in review. Land suitability assessment for pineapple production in Ghana with ecological concerns: a GIS-multi criteria evaluation approach. Submitted to: *Agricultural Systems*.

- Gibbon, A., Silman, M.R., Malhi, Y., **Fisher, J.B.**, Meir, P., Zimmermann, M., Dargie, G.C., Farfan, W., Cabrera, K.G., in review. Ecosystem carbon storage across the grassland-forest transition in the high Andes of Manu National Park, Peru. Submitted to: *Ecosystems*.

- Macdonald, E.A., Collins, M., Clayton, L.M., Malhi, Y., **Fisher, J.B.**, Milner-Gulland, E.J., Macdonald, D.W., in review. Wildlife Conservation and Reduced Emissions from Deforestation in a case study of Nantu Wildlife Reserve, Sulawesi: 1. The effectiveness of forest protection - many measures, one goal. Submitted to: *Environmental Science & Policy*.

- Phillips, O.L., van der Heijden, G., López-González, G., Aragão, L.E.O.C., Lewis, S.L., Lloyd, J.J., Malhi, Y., Monteagudo, A., Almeida, S., Dávila, E.A., Amaral, I., Andelman, S., Andrade, A., Arroyo, L., Aymard, G., Baker, T.R., Blanc, L., Bonal, D., de Oliveira, A.C.A., Chao, K.-J., Cardozo, N.D., da Costa, L., Feldpausch, T.R., **Fisher, J.B.**, et al., in review. *New Phytologist*.

- **Fisher, J.B.**, Sitch, S., Malhi, Y., Fisher, R.A., Huntingford, C., Tan, S.-Y., in press. The carbon cost of plant nitrogen acquisition: A mechanistic, globally-applicable model of plant nitrogen uptake, retranslocation and fixation. *Global Biogeochemical Cycles*.

- **Fisher, J.B.**, Whittaker, R., Malhi, Y., in press. ET Come Home: Potential evapotranspiration in geographical ecology. *Global Ecology and Biogeography*.

- **Fisher, J.B.**, Fortmann, L.P., in press. Governing the data commons: Policy, practice, and the advancement of science. *Information & Management*.

- **Fisher, J.B.**, Malhi, Y., de Araújo, A.C., Bonal, D., Gamo, M., Goulden, M.L., Hirano, T., Huete, A.R., Kondo, H., Kumagai, T., Loescher, H., Miller, S., Nobre, A.D., Nouvellon, Y., Oberbauer, S.F., Panuthai, S., von Randow, C.,

- da Rocha, H.R., Roupsard, O., Saleska, S., Tanaka, K., Tanaka, N., Tu, K.P., 2009. The land-atmosphere water flux in the tropics. *Global Change Biology* 15: 2694-2714. (Cover article).
- Ostle, N.J., Smith, P., Fisher, R., Woodward, F.I., **Fisher, J.B.**, Smith, J.U., Galbraith, D., Levy, P., Meir, P., McNamara, N.P., Bardgett, R.D., 2009. Integrating plant-soil phenomena into global carbon models. *Journal of Ecology* 97: 851-863.
 - **Fisher, J.B.**, 2009. Book review of "Quantifying and Understanding Plant Nitrogen Uptake for Systems Modeling" edited by Ma et al. *Experimental Agriculture* 45(3): 377.
 - Phillips, O.L., Aragão, L., Lewis, S.L., **Fisher, J.B.**, et al., 2009. Drought sensitivity of the Amazon rainforest. *Science* 323(5919): 1344-1347.
 - **Fisher, J.B.**, 2009. Canopy nitrogen and albedo from remote sensing: What exactly are we seeing? *Proceedings of the National Academy of Sciences, USA* 106(7): E16.
 - **Fisher, J.B.**, Tu, K., Baldocchi, D.D., 2008. Global estimates of the land-atmosphere water flux based on monthly AVHRR and ISLSCP-II data, validated at 16 FLUXNET sites. *Remote Sensing of Environment* 112(3): 901-919.
 - **Fisher, J.B.**, Nawaz, R., Fauzi, R., Nawaz, F., Sadek, E., Latif, Z., Blackett, M., 2008. Balancing water, religion and tourism on Redang Island, Malaysia. *Environmental Research Letters* 3(2): 1-6.
 - **Fisher, J.B.**, Baldocchi, D.D., Misson, L., Dawson, T., Goldstein, A.H., 2007. What the towers don't see at night: Nocturnal sap flow in trees and shrubs at two AmeriFlux sites in California. *Tree Physiology* 27(4): 597-610.
 - Dawson, T.E., Burgess, S.S.O., Tu, K.P., Oliveira, R.S., Santiago, L.S., **Fisher, J.B.**, Simonin, K.S., Ambrose, A.R., 2007. Nighttime transpiration in woody plants from contrasting ecosystems. *Tree Physiology* 27(4): 561-575.
 - **Fisher, J.B.**, Trulio, L.A., Biging, G., Chromczak, D., 2007. An analysis of spatial clustering and the implications to wildlife management: A burrowing owl example. *Environmental Management* 39(3): 403-411. (Cover article).
 - **Fisher, J.B.**, Kelly, N.M., Romm, J., 2006. Scales of environmental justice: Combining GIS and spatial data analysis for air toxics in West Oakland, California. *Health & Place* 12(4): 701-714.
 - **Fisher, J.B.**, DeBiase, T.A., Qi, Y., Xu, M., Goldstein, A.H., 2005. Evapotranspiration models compared on a Sierra Nevada forest ecosystem. *Environmental Modelling & Software* 20(6): 783-796.
 - **Fisher, J.B.**, Malhi, Y., Timsit, S., in preparation. The sheltering sky: Persistent cloud cover maintains African rainforests. To be submitted to: *Geophysical Research Letters*.
 - **Fisher, J.B.**, Sitch, S., Huntingford, C., Fisher, R.A., Clark, D., Smith, P., Joshi, M., in preparation. Nitrogen cycling in the QUEST Earth System Model.
 - **Fisher, J.B.**, Aragão, L.E.O.C., Malhi, Y., in preparation. Tropical hydrology: 20 years of precipitation, evapotranspiration, runoff and soil moisture in the tropics.
 - **Fisher, J.B.**, Malhi, Y., in preparation. The potential of potential evapotranspiration models.
 - **Fisher, J.B.**, Malhi, Y., in preparation. Global patterns of plant nitrogen uptake and fixation.
 - Vinya, R., Malhi, Y., **Fisher, J.B.**, Aragão, L.E.O.C., Mwitwa, J., Brown, N., Brodribb, T., in preparation. Stem xylem vulnerability to cavitation differs among miombo forest canopy tree species with varying geographical distribution. To be submitted to: *New Phytologist*.
 - Vinya, R., Malhi, Y., **Fisher, J.B.**, Brown, N., Brodribb, T., in preparation. Stem hydraulic supply constrains leaf biomass allocation patterns among canopy tree species in a seasonally dry tropical forest.
 - Thomas, M.V., Malhi, Y., Fenn, K.M., **Fisher, J.B.**, Morecroft, M.D., Lloyd, C.R., Taylor, M.E., McNeil, D.D., in preparation. An assessment of the carbon uptake of ancient broadleaved deciduous woodland in southern England using eddy covariance. To be submitted to: *Biogeosciences*.

PUBLICATIONS, NON-PRIMARY LITERATURE

- **Fisher, J.B.**, Zardin, E., Bocquet, F., Swann, A., Rüdiger, C., Kyrö, E.-M., Gunthe, S.S., submitted. The new generation of 'land-atmosphere exchange' scientists. *iLEAPS Newsletter* 9.
- **Fisher, J.B.**, 2009. Evapotranspiration from tropical vegetation. *iLEAPS Newsletter* 7: 18.

CONFERENCE PRESENTATIONS

- Mueller, B., Seneviratne, S.I., Hirschi, M., Corti, T., Jimenez, C., Balsamo, G., **Fisher, J.B.**, Jung, M., Reichstein, M., Sheffield, J., Teuling, A.J., Wang, K., Wood, E., 2010. First results from LandFlux-EVAL intercomparison project: Analysis of multi-year datasets. European Geophysical Union, Vienna, Austria.
- **Fisher, J.B.**, Armanios, D., Tu, K.P., 2009. Global evapotranspiration from remote sensing driven by SRB, AIRS and MODIS, validated at 36 FLUXNET sites. American Geophysical Union, San Francisco, California, USA.
- **Fisher, J.B.**, Sitch, S., Malhi, Y., Fisher, R.A., Huntingford, C., Tan, S.-Y., 2009. What principles govern plant nitrogen uptake responses to changes in CO₂, climate and nitrogen deposition? American Geophysical Union, San Francisco, California, USA.
- **Fisher, J.B.**, Tu, K., Armanios, D., 2009. Global evapotranspiration from remote sensing. Joint 6th International GEWEX and 2nd iLEAPS Science Conference; iLEAPS ECSW Meeting; LandFlux Meeting. Melbourne, Australia.
- Morel, A., **Fisher, J.B.**, 2009. Where has the carbon gone? Monitoring biomass and emissions from conversion of rainforest to oil palm in Sabah, Malaysia. Remote Sensing and Photogrammetry Society Annual Conference, Leicester, UK.
- Sitch, S., Clark, D., Cox, P., **Fisher, J.B.**, Fisher, R., Harrison, S., Huntingford, C., Jones, C., Mercado, L., Pacifico, F., 2009. Advances in terrestrial ecosystem processes. QUEST Annual Science Meeting, Swindon, UK.
- **Fisher, J.B.**, Malhi, Y., Fisher, R.A., Tan, S.-Y., Sitch, S., Huntingford, C., 2008. A globally applicable,

mechanistic model of plant nitrogen uptake, retranslocation and fixation. American Geophysical Union, San Francisco, California, USA.

- **Fisher, J.B.**, Malhi, Y., de Araújo, A.C., Bonal, D., Gamo, M., Goulden, M.L., Hirano, T., Huete, A.R., Kondo, H., Kumagai, T., Loescher, H., Miller, S., Nobre, A.D., Nouvellon, Y., Oberbauer, S.F., Panuthai, S., von Randow, C., da Rocha, H.R., Rouspard, O., Saleska, S., Tanaka, K., Tanaka, N., Tu, K.P., 2007, 2008. The land-atmosphere water flux in the tropics. LBA-ECO 11th Science Team Meeting, Salvador, Bahia, Brazil. iLEAPS Science Conference: Current understanding of how integrated land ecosystem atmosphere processes influence climate dynamics, Hyères, France.
- **Fisher, J.B.**, 2008. QUERCC: Quantifying and Understanding Ecosystem Roles in the Carbon Cycle. QUEST Annual Science Meeting, Winchester, UK.
- **Fisher, J.B.**, Malhi, Y., de Araújo, A.C., Bonal, D., da Rocha, H.R., Goulden, M.L., Hirano, T., Kumagai, T., Loescher, H., Miller, S., Nobre, A.D., Oberbauer, S., Saleska, S., von Randow, C., Tu, K.P., 2007. The tropical land-atmosphere water flux: Measurements, models and controls for evapotranspiration in the Amazon. LBA-ECO 11th Science Team Meeting, Salvador, Bahia, Brazil.
- **Fisher, J.B.**, Tu, K.P., 2007. Global trends in potential and actual evapotranspiration based on 20 years of satellite observations. American Geophysical Union, San Francisco, California, USA.
- **Fisher, J.B.**, Malhi, Y.S., 2006, 2007. Modelling plant nitrogen: fixation, uptake and allocation. QUEST, QUERCC Fall meeting, Edinburgh, UK. First JULES Science Meeting, Exeter, UK.
- Tu, K.P., **Fisher, J.B.**, 2006. Remote sensing of the land-atmosphere water flux: Global validation using FLUXNET data. AmeriFlux meeting, Boulder, Colorado, USA.
- **Fisher, J.B.**, 2006. Summary of past, present and future research. International Networking of Young Scientists on Imaging Techniques and GIS: Applications in Environmental and Natural Resources Management. British Council, Universiti Malaya, Kuala Lumpur, Malaysia.
- **Fisher, J.B.**, Trulio, L.A., Biging, G., Chromczak, D., 2006. Use of GIS and spatial analysis for wildlife management measures. American Society for Photogrammetry and Remote Sensing, Reno, Nevada, USA.
- **Fisher, J.B.**, Misson, L., Goldstein, A.H., 2006. Sap flow measurements for ponderosa pine, manzanita and ceanothus at Blodgett Forest, California. Blodgett Forest Research Workshop, Georgetown, California, USA.
- Tu, K.P., **Fisher, J.B.**, 2006. Remote sensing of the land-atmosphere water flux: Global validation using FLUXNET data. Proceedings of the 1st iLEAPS Science Conference, Boulder, Colorado, USA.
- **Fisher, J.B.**, Tu, K., 2005. New global estimates of the land-atmosphere water flux: A fully remote sensing driven, flux site-validated ecophysiological model of evapotranspiration. The 9th International Symposium on Physical Measurements and Signatures in Remote Sensing, Beijing, China.
- Dawson, T., Tu, K., **Fisher, J.B.**, Baldocchi, D., 2004. Partitioning Evaporation and Transpiration Using 18-O of Water. Biosphere Atmosphere Stable Isotope Network Meeting, Point Reyes, California, USA.
- **Fisher, J.B.**, 2004. Estimation of Evapotranspiration Across Multiple Scales: Sap Flow, Flux Measurement, Remote Sensing, and Sociology. NASA Earth System Science Network Symposium, Washington, D.C., USA.
- **Fisher, J.B.**, Tu, K., 2004. Validation of MODIS-Derived Parameters with FLUXNET Measurements: Surface Temperature, Air Temperature, Fraction of Photosynthetically Absorbed Radiation, and Albedo. Numerical Terradynamic Simulation Group's MODIS Vegetation Workshop II, Missoula, Montana, USA.
- Tu, K.P., **Fisher, J.B.**, 2004. Remote sensing of plant transpiration and soil evaporation using MODIS data. Numerical Terradynamic Simulation Group's MODIS Vegetation Workshop II, Missoula, Montana, USA.
- **Fisher, J.B.**, 2003. Environmental Justice / Air Toxics analysis for West Oakland: Combining GIS and spatial data analysis. American Public Health Association (Awarded 1st Place in the Environment Section Student Award Poster Session), San Francisco, California, USA.
- **Fisher, J.B.**, 2003. Environmental Justice / Air Toxics analysis for West Oakland: Combining GIS and spatial data analysis. GIS Day – Public Interest GIS, University of California, Berkeley, USA.
- **Fisher, J.B.**, DeBiase, T.A., Qi, Y., Xu, M., Goldstein, A., 2001. Evapotranspiration methods compared on a Sierra Nevada forest ecosystem. American Geophysical Union, San Francisco, California, USA.
- DeBiase, T.A., Qi, Y., **Fisher, J.B.**, Baldocchi, D., Goldstein, A., Xu, M., Liang, X., 2001. Comparison of potential evapotranspiration methods based on results from FLUXNET sites in the United States. American Geophysical Union, San Francisco, California, USA.
- DeBiase, T.A., **Fisher, J.B.**, Qi, Y., Goldstein, A., 1999. Evapotranspiration revisited: Linking soil moisture and canopy resistance. International Symposium on Integrated Water Resource Management, University of California, Davis, USA.

MEDIA

- Featured in: Hambly, Vivienne, 2009. Into the Amazon's Heart. *Sublime* (October): 12-20.

INVITED LECTURES

- **QUEST: The state of UK climate modelling** (2008)
Korea University, Division of Environmental Science & Ecological Engineering, Seoul, South Korea
European Science Foundation, Porquerolles, France
- **Evapotranspiration is a proxy for biodiversity, but how accurate are these estimates?** (2008)
University of Oxford, UK, School of Geography and the Environment – Biodiversity Research Seminar
- **Earth Observation** (2007)

TippingPoint Climate Art Programme – Climate Change: Scientific Briefing Day for Artists, Oxford, UK

• **From Leaf Measurements to Satellite Remote Sensing: Methods in the Environmental Sciences** (2007)

University of Oxford, UK, Oriel College, Forum on the Environment

• **The land-atmosphere water flux: the individual plant, ecosystem fluxes, global patterns, and the sociological advancement of science** (2005)

Korea University, Division of Environmental Science & Ecological Engineering, Seoul, South Korea

• **Spatial dimensions of environmental justice: GIS and spatial analysis in West Oakland** (2005)

University of California, Berkeley, USA, Department of Environmental Science, Policy, & Management

TEACHING

• **Introduction to Remote Sensing, GIS & Modelling** (2007 – current)

University of Oxford, UK, Environmental Change Institute and School of Geography and the Environment

MSc in Environmental Change & Management

MSc in Biodiversity, Conservation & Management

MSc in Water Science, Policy & Management

• **Earth Observation: Ecological Applications** (2006 – current)

University of Oxford, UK, School of Geography and the Environment

1st year undergraduate techniques course for Geography majors.

• **Land-Surface Climatology** (2007)

University of Oxford, UK, School of Geography and the Environment

• **Evapotranspiration: Sap Flow, Isotopes, Eddy Flux, Modelling & Remote Sensing** (2006)

University of Oxford, UK, Centre for the Environment – Water Science, Policy & Management MSc

• **Senior Research Seminar in Environmental Sciences** (2005 – 2006)

University of California, Berkeley, USA, Department of Environmental Science, Policy, & Management

Fundamentals to conducting, writing, and publishing scientific research; senior thesis end-product. With John Latto, Arielle Levine and Chad White.

• **Environmental Justice: Race, Class, Equity & the Environment** (2004)

University of California, Berkeley, USA, Department of Environmental Science, Policy, & Management

Led discussion sections. Student Evaluations (Overall teaching effectiveness): 99%. With Dara O'Rourke.

• **Natural Resource Sampling & Assessment** (2002)

University of California, Berkeley, USA, Department of Environmental Science, Policy, & Management

Developed and marked labs and examinations. With Greg Biging.

STUDENTS

Graduated 2009

• Armanios, Daniel, MSc in Water Science, Policy & Management 2008-2009

A remote sensing framework to gauge sustainability of community water practices: A quantitative diagnostic for integrated water resource management decision support models

• Gadsden, Martin, MSc in Biodiversity, Conservation & Management 2008-2009

Maximising biodiversity conservation benefits of REDD strategies in Peru

Awarded Distinction

• Krishnamurthy, Krishna, MSc in Environmental Change and Management 2008-2009

Mainstreaming disaster risk reduction into development strategies

Awarded Distinction and Best Overall Performance, ECM 2008-2009 (Coursework, Dissertation and Exams)

• Massey, Ashley, MSc in Biodiversity, Conservation & Management 2008-2009

Dragons prevent deforestation? The protection and governance of Kiang West National Park in the Gambia, West Africa

Awarded Distinction and Best Overall Performance, BCM 2008-2009 (Coursework, Dissertation and Exams)

• Plotnykova, Hanna, MSc in Biodiversity, Conservation & Management 2008-2009

GIS-based conservation management for the Ukraine

• Thomas, Matt, MSc in Environmental Change and Management 2008-2009

Impacts of climate change on an ancient woodland

Awarded Distinction

• Wong, Chun (John) Yuen, MSc in Biodiversity, Conservation & Management 2008-2009

Climate change impacts on polar migratory bird routes

Graduated 2008

• Gibbon, Adam, MSc in Environmental Change & Management, Oxford University 2007-2008

Carbon stocks of the high elevation Andes Mountains: Puna grasslands and upper tropical cloud forests of Manu National Park, Peru

Awarded Distinction and Best Overall Performance, ECM 2007-2008 (Coursework, Dissertation and Exams)

• MacDonald, Ewan, MSc in Environmental Change & Management, Oxford University 2007-2008

Evaluating measures of conservation success: The case study of Nantu Nature Reserve, Sulawesi

Awarded Distinction

• Tan, Su-Yin, MSc in Environmental Change & Management, Oxford University 2007-2008

Modelling nitrogen uptake in temperate and tropical forests
Awarded Best Presentation, Dissertation Proposal

Graduated 2007

• Blandford, Rebecca, MSc in Environmental Change & Management, Oxford University 2006-2007
An investigation of the temporal dynamics of self-organised vegetation patterns in a semi-arid ecosystem
Awarded Distinction and Best Overall Dissertation, ECM 2006-2007

REVIEWER

- *Agricultural & Forest Meteorology*
- *American Public Health Association*
- *Biotropica*
- *Ecology*
- *EOS*
- *Geophysical Research Letters*
- *Geoscience & Remote Sensing Letters*
- *Global Change Biology*
- *Health & Place*
- *Hydrological Processes*
- *Hydrological Sciences Journal*
- *Journal of the American Water Resources Association*
- *Journal of Biogeography*
- *Journal of Selected Topics in Earth Observations & Remote Sensing*
- *Journal of Wildlife Management*
- *Landscape and Urban Planning*
- *Nature*
- *New Phytologist*
- *Oecologia*
- *Remote Sensing of Environment*
- *Tree Physiology*
- *US National Science Foundation (NSF)*
- *Water Resources Research*

CAMPUS ACTIVITIES

- Member, Oxford University Supreme Governing Body (Congregation) (2009-current)
- Ecosystems Group Representative, ECI Management Team, University of Oxford (2008-current)
- Member, ECI MSc Core Teaching Team, University of Oxford (2008-current)
- Coach, Oxford University Men's Basketball Team (Blues) (2006)
- Sports Journalist, Cherwell 24 Newspaper and The Oxford Student (2006)
- Departmental Liaison, UC Berkeley Graduate Assembly (2005-2006)
- Member, Graduate Programs Committee, UC Berkeley Dept. ESPM (2004-2005)
- Graduate Student Representative, Graduate Student Admissions, UC Berkeley Dept. ESPM (2004-2005)
- Member, Judicial Committee, UC Berkeley Graduate Assembly (2004-2005)
- Departmental Delegate, UC Berkeley Graduate Assembly (2002-2005)
- Graduate Student Representative, Faculty Search Committee, UC Berkeley Dept. ESPM (2004)
- Chair, UC Berkeley Graduate Assembly's Committee on Affirmative Action (2004)
- President, UC Berkeley Environmental Sciences Students Association (2001)
- Member, UC Berkeley Hapa Issues Forum (1998-2001)
- Student advisor to the dean, UC Berkeley College of Natural Resources (1997)
- President, Taft High School Ecology Club (1997)

RELEVANT SKILLS

- Geographic Information Systems (ArcGIS; AutoCAD); Photogrammetry and Remote Sensing (PCI Geomatica; IDRISI; Erdas Imagine; ImageJ)
- Ecosystem and Global Modeling (MATLAB; Simile, STELLA; Fortran)
- Statistical, Spatial, and Time Series Analysis (SPUS; SAS; JMP; StatView; CrimeStat)
- Ecology: Plant Physiology, Ecosystem, Population and Community
- Biometeorology; Biodiversity; Biology; Forest and Terrestrial Hydrology
- Stable Isotope Methods and Mass Spectrometry; Civil & Env. Engineering
- Environmental Economics; Forest Management and Economics
- Linear Algebra & Differential Equations; Analytic Geometry & Calculus; Physics
- Chemistry: General, Organic, and Atmospheric
- Sociology; Environmental Justice; Social Science Research Methods
- Intermediate Spanish; Elementary Mandarin Chinese
- Graphic arts: Adobe Photoshop, Illustrator, Premiere; html, web design/development

REFERENCES

• **Professor Yadvinder S. Malhi, Program Leader of Ecosystem Dynamics**
University of Oxford
Environmental Change Institute, School of Geography & Environment
South Parks Road, Oxford, OX1 3QY, UK
E-mail: yadvinder.malhi@ouce.ox.ac.uk
Phone: +44 (0) 1865 285188

• **Professor Dennis D. Baldocchi, Division Chair of Ecosystem Science**

University of California at Berkeley
Department of Environmental Science, Policy & Management
137 Mulford Hall #3114
Berkeley, CA 94720 USA
E-mail: baldocchi@nature.berkeley.edu
Phone: (510) 642-2874

• **Dr. Luiz Aragão**

University of Exeter
E-mail: leocaragao@googlemail.com

• **Professor Robert J. Whittaker**

University of Oxford
School of Geography & Environment
South Parks Road, Oxford, OX1 3QY, UK
E-mail: robert.whittaker@ouce.ox.ac.uk
Phone: +44 (0) 1865 275845

• **Professor Gregory S. Biging, Associate Dean for Forestry**

University of California at Berkeley
Department of Environmental Science, Policy & Management
137 Mulford Hall #3114
Berkeley, CA 94720 USA
E-mail: biging@nature.berkeley.edu
Phone: (510) 642-1249

• **Professor Louise P. Fortmann, Division Chair of Society & Environment**

University of California at Berkeley
Department of Environmental Science, Policy & Management
121 Giannini Hall
Berkeley, CA 94720 USA
E-mail: fortmann@nature.berkeley.edu
Phone: (510) 642-7018

• **Professor Ian Woodward**

Department of Animal & Plant Sciences
University of Sheffield
Sheffield, S10 2TN, UK
E-mail: f.i.woodward@sheffield.ac.uk
Phone: +44 (0) 1142 224647

• **Professor Todd E. Dawson**

University of California at Berkeley
Department of Integrative Biology
3060 Valley Life Sciences Bldg.
Berkeley, CA 94720-3140 USA
E-mail: tdawson@berkeley.edu
Phone: (510) 642-6090